

```

* * * * *
FILE 'USPAT' ENTERED AT 11:31:10 ON 01 MAY 1997
* * * * *
*           W E L C O M E   T O   T H E           *
*           U . S .   P A T E N T   T E X T   F I L E           *
* * * * *
=> s 424/194.1, 196.11,197.11/ccls
    93 424/194.1/CCLS
    0 424/ 196.11/CCLS
    103 424/197.11/CCLS
L1      160 424/194.1, 196.11,197.11/CCLS
        ((424/194.1 OR 424/ 196.11 OR 424/197.11)/CCLS)
=> s 424/194.1,196.11,197.11/icls
    26 424/194.1/ICLS
    8 424/196.11/ICLS
    27 424/197.11/ICLS
L2      50 424/194.1,196.11,197.11/ICLS
        ((424/194.1 OR 424/196.11 OR 424/197.11)/ICLS)
=> s 530/406,411/ccls
    213 530/406/CCLS
    58 530/411/CCLS
L3      258 530/406,411/CCLS
        ((530/406 OR 530/411)/CCLS)
=> s polysaccharide# (p)(viral, fungal or bacterial)
    16505 POLYSACCHARIDE#
    11044 VIRAL
    8906 FUNGAL
    116 VIRAL, FUNGAL
        (VIRAL(W) FUNGAL)
    32124 BACTERIAL
L4      801 POLYSACCHARIDE# (P)(VIRAL, FUNGAL OR BACTERIAL)
=> s 14 and cyanylat?
    20 CYANYLAT?
L5      0 L4 AND CYANYLAT?
=> s cyanilat?
L6      0 CYANILAT?
=> s tetrafluoroborate or ?nitrophenylcyanate
    4311 TETRAFLUOROBORATE
    '1 ?NITROPHENYLCYANATE
L7      4312 TETRAFLUOROBORATE OR ?NITROPHENYLCYANATE
=> s 14 and 17
L8      9 L4 AND L7
=> s 13 and (antigen# or immunogen#)
    17808 ANTIGEN#
    2917 IMMUNOGEN#
L9      174 L3 AND (ANTIGEN# OR IMMUNOGEN#)
=> s 17 and 19
L10     1 L7 AND L9
=> s (11 or 12) and 19
L11     29 (L1 OR L2) AND L9
=> s 17 and 111
L12     0 L7 AND L11
=> d 110 cit,ab

```

1. 5,616,505, Apr. 1, 1997, Haptens tracers, **immunogens** and antibodies for 3-phenyl-1-adamantaneacetic acids; Philip G. Mattingly, 436/531; 435/6; 436/546, 822; 530/388.9, 389.8, 404, 405, **406**, 807 [IMAGE AVAILABLE]

ABSTRACT:

Novel tethered hapten intermediates and related conjugates based on 3-phenyl-1-adamantaneacetic acid, as well as methods for making and using such conjugates. Haptens based on the above core structure may be substituted at any position on the phenyl ring, especially at the para position. Using tethered intermediates, ****immunogens****, tracers, solid supports and labeled oligonucleotides are all described; as are methods for using the intermediates to prepare the conjugates, methods of using the conjugates to make and purify antibodies, as assay tracers, and in nucleic acid hybridization assays. Kits containing haptenated oligonucleotides and anti-hapten conjugates are also described.

=>

against 6M urea and then phosphate buffered saline, solubilization of pptd. protein in saline soln., treatment with RNase, purifn. on Fractogel TSK HW-55, treatment with DEAE-cellulose at pH 9.0, and sterile filtration through a 0.1- μ m Nalgene membrane. The protein was derivatized with 1,4-diaminobutane in the presence of 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide. LPS was isolated from *P. aeruginosa* by a PhOH-H₂O extn. method, the crude LPS was digested with RNase, DNase, and Pronase, the purified LPS was treated with 1% AcOH and heated at 87.degree. for 18 h to remove lipid A, and nontoxic polysaccharide was then purified by chromatog. The polysaccharide was selectively oxidized with NaIO₄. Oxidized polysaccharide was mixed with NaBH₃CN and coupled to the derivatized Micrococcus protein. Mice were immunized with 4.0:27.8 μ g of the polysaccharide:protein conjugate/mouse and then were bled and challenged with *P. aeruginosa*. Active immunity was seen with 8/10 mice and passive immunity was seen with 9/9 mice.

del his

(FILE 'MEDLINE' ENTERED AT 12:45:25 ON 25 AUG 94)

DEL HIS

- 121582 S CARBOHYDRATE# OR GLYCOPROTEIN#
- 63880 S POLYSACCHARIDE# OR OLIGOSACCHARIDE# OR SUGAR# OR SACCHA
- 166476 S L1 OR L2
- 57196 S CYANYLAT? OR CN OR CYANO?
- 1362 S L4 AND L3
- 22 S CDAP OR CTEA OR PNPC
- 0 S L6 AND L5
- 180415 S LINK? OR CROSSLINK? OR CONJUGAT?
- 274 S L8 AND L5
- 4 S CYANOTRIETHYLAMMONIUM OR TETRAFLUOROBORATE(SA)CYANO OR

FILE 'CA' ENTERED AT 12:57:54 ON 25 AUG 94

- 10 S L10
- 68 S L9
- 105153 S ANTIGEN? OR IMMUNOGEN? OR VACCIN?
- 10 S L13 AND L12
- 4 S BIFUNCTIONAL AND L12

del his

Handwritten: 456,694

28/12/94
 08/ 456,694

=> d his

(FILE 'USPAT' ENTERED AT 13:20:37 ON 21 SEP 94)

SET PAGELENGTH SCROLL

L1 10 S CYANYLAT?
 L2 9 S CYANOTRIETHYLAMMONIUM OR TETRAFLUOROBORATE#(5A)CYANO OR
 NIT
 L3 20 S CDAP OR CTEA OR PNPC
 L4 312132 S LINK? OR CROSSLINK? OR CONJUGAT?
 L5 8 S L3 AND L4
 L6 58127 S POLYSACCHARIDE# OR OLIGOSACCHARIDE# OR SUGAR# OR SACCHAR
 IDE
 L7 16743 S IMMUNOGEN? OR ANTIGEN? OR VACCIN?
 L8 6922 S L7 AND L6
 L9 4703 S L8 AND L4
 L10 4 S L3 AND L9
 L11 480518 S ACTIVAT? OR ACTIVE
 L12 4 S L11 (5A) L10
 L13 1970 S L11 (5A) L6
 L14 540 S L13 AND L7
 L15 328 S L14 AND L4
 L16 1656 S 530/402-411/CCLST
 L17 1656 S L16 AND L16
 L18 44 S L16 AND L15
 L19 711 S 530/395/CCLST
 L20 2188 S (L19 OR L16)
 L21 83 S L20 AND L15
 L22 1396 S L7(10A)L6
 L23 46 S L22 AND L21
 L24 11 S (L2 OR L3) AND L4

3596 TETRAFLUOROBORATE#

37132 CYANO

9 TETRAFLUOROBORATE#(5A)CYANO

0 NITROPHENYLCYANATE#

L2 9 CYANOTRIETHYLAMMONIUM OR TETRAFLUOROBORATE#(5A)CYANO OR NIT

RDP

HENYLCYANATE#

=> d 1-9

1. 5,342,607, Aug. 30, 1994, Receptor mediated endocytosis type magnetic resonance imaging contrast agents; Lee Josephson, 424/9; 128/653.4;